

WHAT ARE CLAIMED ARE:

1. A method for manufacturing a semiconductor device, comprising the steps of:

(a) forming a laminated substrate by laminating a device formation layer consisting of single crystalline semiconductor on a supporting substrate consisting of single crystalline semiconductor via an insulating layer wherein a direction of a crystallographic axis of the device formation layer is shifted from a corresponding crystallographic axis of the supporting substrate;

(b) forming semiconductor devices on the device formation layer within a plurality of areas divided by scribe lines extending to a direction being parallel to a direction of a crystallographic axis where the supporting substrate is easy to be cleaved; and

(c) splitting the laminated substrate into a plurality of chips by cleaving the supporting substrate along the scribe lines.

2. A method for manufacturing a semiconductor device according to claim 1, further comprising, between the step (b) and the step (c), the step of forming grooves reaching at least a bottom of the device formation layer from a surface of the device formation layer along the scribe lines.

3. A method for manufacturing a semiconductor device according to claim 1, wherein

the supporting substrate and the device formation layer consist of single

crystalline silicon,

orientation of crystal plane of laminating surfaces of both supporting substrate and device formation layer is [100] plane, and

a <110> direction of the device formation layer is shifted from a <110> direction of the supporting substrate just at an angle of 42 to 48 degree.

4. A method for manufacturing a semiconductor device according to claim 3, wherein the scribe lines are parallel to the <110> direction of the supporting substrate.

5. A method for manufacturing a semiconductor device according to claim 3, wherein the step (b) further comprises the step of forming an active device on the device formation layer, a moving direction of carrier of active device being the <100> direction of the device formation layer.

6. A method for manufacturing a semiconductor device according to claim 1, wherein the step (b) further comprises the step of forming a wiring layer comprising a plurality of wirings substantially extending to one direction wherein the plurality of wirings in the wiring layer and the direction of a crystallographic axis where the supporting substrate is easy to be cleaved are configured to be substantially parallel.